

CLAIMS:

1.

A device for use with conveyor means and a detector station, said conveyor means for moving empty beverage containers, suitably bottles of different shapes and sizes, past the detector station, and said detector station for providing characteristic data about the containers, and means which based on such data are capable of determining how the
5 containers are to be handled subsequent to detection,

- wherein said device at a downstream end of said conveyor means defines a bottle raiser capable of guiding transported bottles into a standing rest position bottom first, and

- wherein said raiser includes a bottle stabilizer which on basis of said bottle data is held
10 by means of a motor in a first position in contact freedom with a bottle as a function of data regarding the bottle, such as at least one of its diameter, height and weight, said stabilizer then movable to a second position for in a stabilizing step bearing against a portion of the bottle and for pushing the bottle against a stationary back wall, and releasing said bottle from the stabilizing step for onward movement on a further
15 conveyor.

2.

A device according to claim 1, wherein a guide duct or shaft is provided for guiding said bottle with its bottom first in direction of travel down to said standing rest position at a rest.

3.

A device according to claim 1, wherein a bottle ejector is provided, said ejector being movable out of said back wall in order to push the container in standing posture onto said further conveyor in standing posture thereon.

4.

A device according to claim 1, 2 or 3, wherein said stabilizer and said ejector are made as common rotatable unit, said unit having at least one vertical wing secured to a vertical spindle, and which on rotational movement in one direction is rotatable in towards the container for stabilization thereof against said back wall, and on rotation in
5 an opposite direction is movable out through said back wall for ejection of the bottle.

5.

A device according to claim 4, wherein at least a lower portion of the wing has mutually spaced fingers, and wherein said back wall has fingers mutually so spaced that fingers of the wing can pass in respective spaces between fingers of the back wall.

6.

A device according to claim 4 or 5, wherein the wing as seen in horizontal section is slightly curved.

7.

A device according to anyone of claims 1 – 6, wherein the rotatable unit has three wings with the same angular separation.

8.

A method for use with conveyor means and a detector station, said conveyor means for moving empty beverage containers, suitably bottles of different shapes and sizes, past the detector station, which provides for characteristic data about the containers, and based on such data determining how the containers are to be handled subsequent to

5 detection, comprising the steps of:

- at a downstream end of said conveyor means guiding a transported bottle down into a standing rest position bottom first,

- stabilizing the bottle based on said bottle data by using a motor operated stabilizer held in a first position in contact freedom with the bottle as a function of said bottle data, such as at least one of its diameter, height and weight,

10

- moving said stabilizer to a second position for in a stabilizing step bearing against a portion of the bottle and for pushing the bottle against a stationary back wall, and

- releasing said bottle from the stabilizing step for onward movement on a further conveyor.

9.

A method according to claim 8, wherein said bottle is moved along a curved path for guiding said bottle with its bottom first in direction of travel down to a standing posture at said rest position.

10.

A method according to claim 8 or 9, wherein said bottle is pushed by an ejector out from said rest position, said ejector being movable out of said back wall, and wherein the bottle is pushed in standing position onto said further conveyor.

11.

A method according to claim 8, 9 or 10, wherein said stabilizer and said ejector operate as a common rotatable unit, which on rotational movement in one direction rotates in towards the container for stabilisation thereof against said back wall, and on rotation in an opposite direction moves out through said back wall for ejection of the bottle.